What is claimed is:

1. A printing apparatus that prints print data sent from a host apparatus connected via a network, comprising:

5   a storage section including an image data area that stores image data acquired by interpreting a page description language of the print data sent from said host apparatus and a compressed data area that stores compressed data obtained by compressing said image data;

10   a first decision section that decides whether or not to store the compressed data of said print data in said compressed data area;

          a prediction section that predicts a data volume of the compressed data of said print data; and

15   a second decision section that decides whether it is possible to store or not the compressed data of the data volume predicted by said prediction section in said compressed data area.

20   2. The printing apparatus according to claim 1, wherein said first decision section decides whether or not to store the compressed data of the print data in said compressed data area based on information added to said print data and said prediction section predicts a volume

25   of the compressed data of the print data based on the information added to said print data.

3. The printing apparatus according to claim 2, wherein

said information added to the print data at least includes the type of said print data, the number of total pages and the size of a printing medium to which the data is printed.

4. The printing apparatus according to claim 3, wherein said first decision section decides whether or not to store the compressed data of the print data in said compressed data area based on the type of said print data.

5. The printing apparatus according to claim 4, wherein said first decision section decides, when the type of said print data is secret printing, that the compressed data of the print data should be stored in said compressed data area.

6. The printing apparatus according to claim 1, wherein said first decision section decides, when printing of the print data received from said host apparatus is not immediately carried out, that the compressed data of the print data should be stored in said compressed data area.

7. The printing apparatus according to claim 6, wherein said first decision section decides, when a plurality of print data pieces is received from said host apparatus, that the compressed data of any one of those print data pieces should be stored in said compressed data area.

8. The printing apparatus according to claim 6, wherein said first decision section decides, when no printing medium to which the image data of said print data is printed exists in the apparatus, that the compressed data

5   of the print data should be stored in said compressed data area.

9. The printing apparatus according to claim 3, further comprising a compression/decompression section that

10   compresses the image data of said print data and stores the compressed data in said compressed data area on one hand, and decompresses the compressed data stored in said compressed data area on the other, wherein said prediction section predicts a data volume of the

15   compressed data of said print data based on said total number of pages and the compression rate of said compression/decompression section corresponding to the size of the printing medium to which the data is printed.

20   10. The printing apparatus according to claim 9, wherein the compression rate of said compression/decompression section is a compression rate when the compression rate is a minimum for the size of said printing medium to which the data is printed.

25

11. The printing apparatus according to claim 9, further comprising a language interpretation section that interprets a page description language of the print data

received from said host apparatus and acquires image data, wherein said second decision section decides whether it is possible to store or not the compressed data of the data volume predicted by said prediction section in said

5   compressed data area and, if it is possible to store the compressed data, instructs said language interpretation section to subject the page description language to an interpretation process and instructs said compression/decompression section to carry out a

10   compression process.

12. The printing apparatus according to claim 11, further comprising a printing section that prints image data stored in said image data area to a printing medium,

15   wherein said compression/decompression section, when carrying out printing processing on the compressed data stored in said compressed data area, carries out decompression processing on the compressed data.

20   13. The printing apparatus according to claim 1, wherein said second decision section, when it is not possible to store the compressed data of the data volume predicted by said prediction section in said compressed data area, notifies this to said host apparatus.

25

14. A copying apparatus that prints print data sent from a host apparatus connected via a network, comprising:
        the printing apparatus according to claim 1; and

a copying unit that scans a document and copies the scanned image data, wherein the compressed data area of the storage section of said printing apparatus stores the image data scanned by said copying unit.

5

15. An image communication apparatus that prints print data sent from a host apparatus connected via a network, comprising:

the printing apparatus according to claim 1; and

10   an image communication unit that transmits/receives image data via a communication line, wherein the compressed data area of the storage section of said printing apparatus stores the image data transmitted/received by said image communication unit.

15

16. A multi-function apparatus that prints print data sent from a host apparatus connected via a network, comprising:

the printing apparatus according to claim 1;

20   an image communication unit that transmits/receives image data via a communication line; and

a copying unit that scans a document and copies the scanned image data, wherein the compressed data area of

25   said printing apparatus stores the image data transmitted/received by said image communication unit and image data scanned by said copying unit.

17. A printing apparatus that prints print data sent from
a host apparatus connected via a network, wherein image
data is created by interpreting a page description
language of the print data received from said host
5   apparatus and said image data is compressed according
to a compression system that can predict a data volume
after compression of said image data, and stored.

18. A method for printing print data sent from a host
10   apparatus connected via a network, comprising the steps
of:
        receiving print data from said host apparatus;
        deciding whether or not to store compressed data
obtained by compressing image data of the received print
15   data in a compressed data area of a storage section;
        predicting a data volume of said compressed data
if the compressed data should be stored in said
compressed data area;
        deciding whether it is possible or not to store the
20   compressed data of the predicted data volume in said
compressed data area;
        interpreting the page description language of said
print data and acquiring image data before printing said
print data if it is possible to store the compressed data
25   of the predicted data volume, and storing the compressed
data obtained by compressing the image data in said
compressed data area.

19. The method according to claim 18, wherein, when carrying out printing processing on the compressed data stored in said compressed data area, said compressed data is decompressed and printed.